

El Paso Community College

Syllabus

Part II

Official Course Description

SUBJECT AREA	<u>Physics</u>
COURSE RUBRIC AND NUMBER	<u>PHYS 2125</u>
COURSE TITLE	<u>Engineering Physics Laboratory I</u>
COURSE CREDIT HOURS	<u>1 0 : 3</u> Credits Lec Lab

I. **Catalog Description**

Provides a basic laboratory experiments supporting theoretical principles presented in PHYS 2325 involving the principles and applications of classical mechanics, including harmonic motion and physical systems; experimental design, data collection and analysis, and preparation of laboratory reports.

Corequisite: PHYS 2325. (0:3). Lab fee.

II. **Course Objectives**

Upon satisfactory completion of this laboratory course, the student will be able to:

- A. To experiment, collect data, conclude and report in a logical and scientific manner about various classical mechanical systems.
- B. To be able to determine sources of error from actual collected values in comparison to theoretical values in various classical mechanical scenarios.
- C. Design new applications of various classical mechanical systems
- D. To evaluate accuracy of collected values in comparison to calculated values by calculating percentage errors when learning about classical mechanical systems.
- E. To design new environment systems to apply various concepts of classical mechanical systems.

III. **THECB Learning Outcomes (ACGM)**

- 1. Prepare laboratory reports that clearly communicate experimental information in a logical and scientific manner.
- 2. Conduct basic laboratory experiments involving classical mechanics.
- 3. Relate physical observations and measurements involving classical mechanics to theoretical principles.
- 4. Evaluate the accuracy of physical measurements and the potential sources of error in the measurements.
- 5. Design fundamental experiments involving principles of classical mechanics.
- 6. Identify appropriate sources of information for conducting laboratory experiments involving classical mechanics.

III. **Evaluation**

- A. Preassessment
There is no preassessment for this course.
- B. Postassessment

The scheduling of laboratory exercises will be the sole prerogative of the instructor. This will be indicated to the student in the course syllabus that is distributed at the beginning of the semester. The philosophy of the college endorses frequent evaluation.

C. Remediation

The instructor may provide a student with a means of improving a grade. The timing, form, and method of remediation will be determined by the instructor and included in the course syllabus.

D. Grading

All grading will follow current EPCC Catalog standards. The assignment of letter grades to percent scores obtained in various class activities will be determined by the instructor and included in the course syllabus.

IV. Disability Statement (American with/Disabilities Act [ADA])

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Room C-112 (831-2426); TM Room 1400 (831-5808); RG Room B-201 (831-4198); NWC Room M-54 (831-8815); and MDP Room A-125 (831-7024).

V. 6 Drop Rule

Students who began attending Texas public institutions of higher education for the first time during the fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.